

Chapter Five

RESEARCH METHODOLOGY

The focus of this chapter is a description of the research methods and procedures used in this study, namely the methods of data collection, population and samplings, the field work and methods of data analysis. Also included in this chapter is a brief profile of the respondents.

5.1 Population and Sampling

Under the New Remuneration System, public servants are classified into three main groups:

1. The Top Level Management
2. Management and Professional
3. Support Group

For a detailed discussion of this new division of the public servants, please refer to Chapter II.

In the Ministry of Education, out of eighteen officials in the Top Level Management (Premier Posts) twelve are Education Officers, five are officers from the Administrative and Diplomatic Service while one (the Director of the

newly established Tertiary Education Department) is a University Professor being seconded from Universiti Kebangsaan Malaysia.

In the Managerial and Professional group there are about 542 Education Officers. The other officers in the group are mainly Administrative and Diplomatic Service Officers. Others include Systems Analyst, Engineers, Accountants and a Quantity Surveyor.

The Support Group is made up of 284 non-graduate Education Officers while the rest are mainly Administrative Assistants (clerks, stenographer and typist).

For this study, the Ministry of Education will be confined to only the departments and divisions at the Federal Level, thus the number of officers mentioned above are the number of staff in those departments and divisions only. The number is therefore small as It does not include those in schools all over the country, District and State-Education Departments, Teachers Training Colleges, branches of Divisions (like those of the Inspectorate and Examination Divisions) in the states. Since the study is concerned with the perceptions of the Ministry of Education's Officials and the officials of a union representing the Teaching Professions, respondents are chosen exclusively from among the Education Officers. Table 5.1 below shows the population of Education Officers in the various departments and divisions.

Table 5.1 : Population of Education Officers In The Ministry of Education

Department /Division	T M	M & P	S G
1 Office of Director General	1	-	-
2 Dept of Pre-school, Primary & Secondary Education	1	-	-
Division of Pre-school, Pri. & Sec. Education	1	41	20
Division of Teachers Education	1	66	23
Division of Curriculum Development	1	115	89
Division of Textbooks	-	35	17
Division of Sports	-	5	-
3 Dept. of Technical Education	1	-	-
Div. of Technical & Vocational Education	-	9	8
Div. of Tech. & Vocational Curriculum	-	9	17
Div. of Polytechnic Management	-	9	13
Div. of Plan. & Res. on Tech & Voc. Edu.	-	8	-
Div. of Training & Staff Development	-	3	-
4. Div. of International Relations	-	4	-
5. Div. of IHL's Student Intake	-	4	-
Div. of Overseas Student Welfare	-	1	-
6. Dept. of Private Education	-	1	-
Div. of Planning & Research	-	1	-
Div. of Registration & Quality Control	-	3	-
Div. of Information	-	2	-
7. Dept. of Special Education	-	1	-
Div. of Planning & Research	-	2	-
Div. of Special Education Service	-	2	-
Div. of Training & Support Service	-	1	-
8. Dept. of Islamic & Moral Education	1	-	-
Div. of Islamic & Moral Education	-	13	-
Div. of Missionary & Leadership	-	6	-
Div. of Islamic & Moral Educ. Curriculum	-	6	-
9. Examination Syndicate	-	71	39
10. Education's Institution Inspectorate	1	30	-
11. Aminuddin Baki Institute	1	54	-
12. Div. of Education's Plan. & Research	1	78	26
13.Div. of Information Technology	1	32	73
Total	12	542	284

TM - Top Management,

M&P - Management and Professional

SG- Support Group

Source: *Senarai Perjawatan Di Kementerian-Kementerian dan Jabatan-Jabatan Dalam Anggaran Perbelanjaan Persekutuan 1996*, Kuala Lumpur : Percetakan Nasional, 1995. Collated from pp. 683 - 802.

Questionnaires were only distributed to divisions with a population of three or more Education Officers. The samples were chosen by stratified random sampling. For the survey, the population was divided into two groups i) the Management and Professional Group and ii) the Support Group. No Top Level Management Officials were asked to be a respondent of the survey but five of the most senior among them agreed to be interviewed on issues and problems concerning the NRS. A leading official of the NUTP was also interviewed.

5.2 Data Collection Methods.

Three main sources of data obtained and used in this study are i) survey questionnaires distributed to Education Officers in the Ministry ii) formal interviews with key officials of the Ministry and NUTP, and informal interviews with former colleagues and other officials in the various divisions of the ministry, and iii) newspaper reports, articles and letters written to the papers on the subject of NRS. Besides these three sources of data, the writer is also fortunate to be given a copy of a report of a 1994 survey (*Laporan Kajian Pelaksanaan Sistem Saran Baru*) on the subject carried out by the Ministry, from which this writer is able to derive valuable data and insights.

1. Survey Questionnaires

The questionnaire itself is divided into six-sections. The first section is for information on the respondent's background which includes service group, number of years of service, salary, level of education and whether he is an appraiser, appraisee, or both? The second section seeks his/her view on the Annual Work Target (AWT), the third on the New Performance Appraisal System, the fourth is on the Matrix Salary Schedule, the fifth is on his 1995's performance appraisal and the sixth section is on his perception on the NRS as a whole. Except for the first section, the other sections contain a few statements and the respondents are required to state whether he 'strongly agree', 'agree', 'disagree', or 'strongly disagree' (Likert Scales of 1 - 5) with the statements. If he is unable to state his opinion on the issue, he may choose 'neutral'. At the end of every sections, the respondents are invited to give further comments, if any, on the topics.

2 Interviews

'Unstructured' interviews were conducted with senior officials of both the Ministry and the Union. In interviewing the Ministry Officials, the focus was on Education Officers as a whole and the implementation of the NRS in general. With the Union official, the focus was on the teachers' grievances with the NRS.

Besides these formal interviews, the writer had numerous informal discussion on the subject with officials from the various division, especially those from the Organisational Development and Service Division where the writer was formerly a member of the staff from 1984 to 1991.

3. Newspaper reports, articles and letters written to newspapers

Since the implementation of the NRS in 1992, news, articles and letters concerning the NRS appeared almost everyday in the newspapers, including *The New Straits Times*, *The Star*, *Business Times*, and *Berita Harian*. The articles and letters provide interesting insights into people's reception and perception of the system.

5.3 Field Work

1. Pilot Study

The questionnaires used in the survey had earlier on been used in a 'Mini Survey' conducted in partial fulfilment of the requirement of the writer's Research Methodology paper during the first year of graduate study. In that survey, fifty respondents from the Services and Career Division of the Public Services Department were selected. They were requested to response to similar questions in this study. The results of that survey allows

improvements to be made to the original questionnaires. A few minor changes were however made to suit the new respondents.

2. Actual survey

A total of 280 questionnaires were distributed to the various divisions with a population of five or more Education Officers. Each respondent was given two weeks to respond. Only about half of the questionnaires were duly completed and returned after the stipulated time. However, with the co-operation of many former colleagues and friends, the writer was able to gather a total of 215 responses at the end of one month period. Only 205 of the questionnaires were found to be usable. As shown in Table 5.1, these respondents which made up of 26% non-graduates and 74% graduates can be considered a good and fair representation of the actual non-graduates (34%) and graduate Education officers' (66%) population of the ministry.

Table 5.2 : Survey Populations and Samples.

Service Group	Population	Respondents
Management & Professional	542/826 (66%)	152/205 (74%)
Support Group	284/826 (34.4%)	53/205 (26%)

5.4 Methods of Data Analysis

Two broad methods of analysis are utilised to analyses the data. Data obtained through questionnaires were analysed by summarising the result into frequency tables. This was done using the SPSS PC+ statistical software. For each question (statement), the relevant frequency table is analysed in terms of percentage of responses for each of the answer category. The purpose was to obtain the majority opinion with regard to each question. To test the significance of the relationship between the selected independent and dependent variables, the chi square (χ^2) techniques was adopted. To confirm acceptance or rejection of research hypotheses, the Pearson Product Moment Correlation was used.

With respect to data obtained from other means than the actual survey, the analysis was made by utilising criteria obtained from literature on performance appraisal, human resource management and public administration. As an example, for the performance appraisal, the essential considerations in performance appraisal and development was discussed.

5.5 Profile of the Respondents

A total of 205 questionnaires were analysed in this survey. Profile of the respondents are as follows:

1. Distribution by age

The age distribution may help us determine the level of experience and maturity of the respondents. The age of the respondents range from 31 years to above 51 years old. It is the Ministry's policy that only experienced Education Officers (with at least five years of teaching experience in schools) are posted in the Ministry. As a result of this practice, there was no officials less than 30 years in the sample.

Table 5.3 : Distribution of respondents by age group.

N = 205

Age Group	Frequency	Percentage
31 to 35 years	27	13.2%
36 to 40 years	38	18.5%
41 to 45 years	39	19.0%
46 to 50 years	58	28.3%
51 years and above	36	17.6%
No Response	7	3.4%
Total	205	100%

2. Distribution by Years of Service

The 'length' of service of the respondents can also help us to determine the level of experience and commitment of the respondents. From the following table, it can be seen that almost 90% have been in the education

service for eleven years or more. In fact those who have served between 26 to 30 years made up the biggest number.

Table 5.4 : Distribution of Respondents by Years of Service

N = 205

Years of Service	Frequency	Percentage
10 years and below	23	11.2%
11 to 15 years	30	14.6%
16 to 20 years	40	19.5%
21 to 25 years	48	23.4%
26 to 30 years	50	24.4%
31 years and above	12	5.9%
No Response	2	1%
Total	205	100%

3. Distribution by Respondents' Educational Attainment

Many believe that an employees' level of education play a significant role in his/ her reception of any scheme or policies purportedly implemented for their benefits. Of the 205 respondents in this case, 75.5% have had tertiary education.

Table 5.5 : Distribution of Respondents by level of education. N = 205

Education	Frequency	Percentage
SPM / MCE	31	15.1%
STP / HSC	15	7.3%
Diploma	7	3.4%
Basic Degree	79	38.5%
Post-Graduate Degree	73	35.6%
Total	205	100%

4. Distribution by Respondents' Service Group

The respondents' service group correspond exactly with their academic qualification. Thus, 152 (74%) are in the Managerial and Professional Group while the other 53 (26%) are in the Support Group.

Table 5.6 : Distribution of Respondents by Service Group

N = 205

Service Group	Frequency	Percentage
Managerial and Professional	152	74%
Support Group	53	26%
Total	205	100%

5. Distribution by role

The writer believes that whether a civil servant is just on appraiser or whether he is both appraiser and appraisee has an effect on his view on the NRS as a whole and on performance appraisal in particular. Thirty-nine (19%) of the respondents are appraisee only, while 163 (79.5%) are both appraiser and appraisee. Three respondents (1.5%) did not indicate their role.

Table 5.7: Distribution of Respondents by their role.

N = 205

Role	Frequency	Percentage
Appraisee	39	19%
Appraiser and Appraisee	163	79.5%
Unknown	3	1.5%
Total	205	100%

6. Distribution by Respondents Salary

Since many of the debates surrounding the NRS concerns the new salary structure, it is interesting to find out the salary of the respondents. Of the 205 respondents, more than 53% are drawing more than RM 2000 per month.

Table 5.8 : Distribution of Respondents by Salary.

N = 205

Salary	Frequency	Percentage
RM 1500 and below	9	4.4%
RM 1501 - 2000	62	30.2%
RM 2001 - 2500	46	22.4%
RM 2501 - 3000	40	15.5%
RM 3001 and above	24	11.7%
Unknown	24	11.7%
Total	205	100%

7. Summary of Respondents' Profile.

A summary of the profile and frequencies of the selected demographic factors is shown in Table 5.9 to give an overall picture of the respondents.

Fig. 5.9 Summary of Respondents' Profile N=205

Demographic Factors	Frequency
1. Age Group	
31 - 35 years	27
36 - 40 years	38
41 - 45 years	39
46 - 50 years	58
51 years and above	36
Unknown	7
Total	205

2. Years of Service	
10 years and below	23
11 - 15 years	30
16 - 20 years	40
21 - 25 years	48
26 - 30 years	50
31 years and above	12
Unknown	2
Total	205

3. Academic Qualifications	
SPM/MCE	31
STP/HSC	15
Diploma	7
Bachelor's Degree	79
Post- Graduate Degrees	73
Total	205

4. Service Groups	
Managerial and Professional	152
Support Group	53
Total	205

5. Salary	
RM 1500 and below	9
RM 1501 - 2000	62
RM 2001 - 2500	46
RM 2501 - 3000	40
RM 3001 and above	24
Unknown	24
Total	205

The above table shows that about 65% of the respondent are above forty years old and a majority (90%) has served more than ten years in the Education Service. Seventy-four percent, all from the Managerial and Professional Group have had university degrees. In term of salary, more than half of the total number of respondents draw more than RM2000 per month.